



TRANSLATIONS • 1426 RIDGEVIEW ROAD • COLUMBUS, OHIO 43221 • (614) 486-2014

I hereby certify that the attached document is a true and accurate translation of the German-language patent application titled "Foldable alphanumeric keypad for mobile phones," to the best of my knowledge and belief.



Trudy E. Peters
ALTco Translations
March 6, 2001

The invention relates to an alphanumeric keypad, which is connected to a mobile phone.

Currently, brief written messages are entered into a mobile phone via SMS (Short Message Service) on a keypad on the front of the phone. Here, several letters are assigned to one number button on the phone. For instance, key 1 = GHI, and 2 = JKL. With this method, writing is very time-consuming. Another possibility is a small, separate alphanumeric keypad, which can be inserted into the existing cellular phone holder. Using this method, inputting letters is quick and easy, but the big disadvantage is the inconvenience of having to carry this separate and rigid keypad along with the cellular phone.

10 The object of this invention is an alphanumeric keypad for mobile phones that does not have the above-mentioned disadvantages in sending SMS-messages or transporting it.

According to the invention, these problems are solved with a mobile-phone keypad having the identifying characteristics of the independent claims.

The solution according to the invention has the following advantages in particular:

15 The alphanumeric keypad (membrane keys, pushbuttons and/or touchscreen display pages) is stored in such a way that it closely follows the shape of the mobile phone. When needed, this keypad is folded out and functionally connected to the front keypad by means of a switching contact. Now, the message can be quickly typed in and sent. After the message has been transmitted, the keypad is folded back and the connection disabled. Now the mobile
20 phone can be used for phone calls as usual. Touchscreen display pages can be used for interactive communication (keypad) or for displaying internet pages.

The invention is depicted in the enclosed drawings as an example, where

Fig. 1 shows a cellular phone with laterally folded-out housing component (2) containing the alphanumeric keypad (1) and/or touchscreen display page. Hinges (3) permit
25 housing component (2) to be folded over.

Fig. 2 shows a cellular phone with folded-back housing component.

Fig. 3 shows a cellular phone with unfolded touchscreen display pages with, for instance, an internet image on pages 6, 7, 8, and an alphanumeric keypad on page 9. Via hinges 10, 11, 12, 13, the pages can be folded together or unfolded.

As can be seen in the drawings, the alphanumeric keypad (membrane keys, pushbuttons and/or touchscreen display pages) is stored in such a way that it closely matches the shape of the mobile phone. When needed, this keypad is folded out and functionally connected to the front keypad by means of a switching contact. Now, the message can be quickly typed in and sent. The touchscreen display pages can be used for interactive communication (keypad) or for displaying internet pages.

In Fig. 1, the keypad (membrane keys, pushbuttons and/or touchscreen display pages) 1, especially alphanumeric keypad, is connected to the mobile phone, with keypad 1 installed separately in housing component 2, and placed near the housing on one of the sides of the cellular phone housing, especially the back of the mobile phone (Fig. 2). Housing component 2, incl. keypad, can be folded by means of hinges 3.

Several touchscreen display pages, e.g. one to six pages, especially four touchscreen display pages 6, 7, 8, 9 (see Fig. 3), are foldable via hinges 10, 11, 12, 13.

The keypad, when folded out, is functionally connected to the front keypad via a contact. When the keypad is returned to its folded position, its keys are disabled via the contact.